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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/588,853

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Camille Dupuy

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EXAMINER

BADR, HAMID R

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

09/15/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/588,853	Applicant(s) DUPUY ET AL.	
	Examiner HAMID R. BADR	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-51 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 28-51 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/9/2006, 12/11/2006, 1/10/2007</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

Claim 33 is objected to for referring to a cancelled claim. Correction is required.

Claim 35 is objected to for ":lour". If this word is meant to be "flour", correction is required.

Claim 36 is objected to for the names of microorganisms. These names should be either underlined or *italicized*. Correction is required.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 28-51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 28 is indefinite. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a

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required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 28 recites the broad recitation a cereal product, and the claim also recites baked bakery product which is the narrower statement of the range/limitation.

4. Claim 28 is indefinite for "including". It is not clear whether "including" is indicating the presence of the acid fermented flour in the baked bakery product or refers to the dry flavor enhancing agent.

5. Claim 28 is indefinite for "it also includes". It is not clear what this phrase is referring to.

6. Claim 45 is indefinite. The claim recites "the weight ratio" in percentage. On the other hand it is not clear what is meant by "firstly" and "secondly".

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 28-48 and 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bel Rhid et al. (US 6,432,459; hereinafter R1).

9. R1 discloses a process for the preparation of flavoring compounds and use of these compositions in bakery products. (Title and Abstract).

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10. R1 discloses a process for the bioconversion of sulfur containing compounds such as cysteine as well as glutathione in the presence of organic acids such as lactic, and pyruvic acids or esters thereof. (Col. 1 line 55 to col. 2 line 13)

11. R1 discloses that the preferred yeast for the bioconversion process is baker's yeast. (Col. 2, lines 14-20).

12. R1 discloses the molar ratio between the sulfur-containing compounds and the organic acid is about 1:1 or up to about 1:2. (Col. 2, lines 20-25).

13. It is noted that sour dough (acid fermented flour) contains lactic acid as the major organic acid and that the yeast extract is a good source of sulfur compounds such as cysteine and glutathione, it would be obvious to use these materials as the starting materials in the dough and allow the baker's yeast component of the dough to carry out the bioconversion process in the normal dough fermentation as disclosed by R1.

14. Given that R1 discloses the molar ratio between the sulfur-containing compounds and the organic acids, it would be obvious to calculate and optimize the weight ratio of the acid fermented flour and the yeast extract, as presently claimed, for the optimum results. The dry acid fermented flour (dried sour dough) and dry yeast extract are both known in the art; therefore, making a mixture of powders comprising acid fermented flour and yeast extract, having the dry matter as presently claimed, would be obvious to an artisan.

15. R1 discloses that the liquid containing the flavors can be used as is or can be dried in a powder form. (col. 2, lines 45-48).

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16. R1 discloses that a heat treatment of the inventive composition will bring about more roasty and bread crust -like notes. (Col. 2, lines 59-65).

17. R1 discloses that such a flavoring composition can be used in bakery products, so as to improve the roasty; popcorn-like and bread crust –like notes. Furthermore, the original flavoring composition before heat treatment can be either added to the various constituents and ingredients to be baked (in dough) or applied as coating. (Col. 3, lines 13-22).

18. It is also noted that methods for making a sour dough and drying it to make a powder are known in the art. Sour doughs are usually made using a single flour type of a combination of flour-types as presently claimed. The sour doughs can also be make with known amounts of lactic acid as presently claimed.

19. Incorporation of ascorbic acid, emulsifiers, stabilizing-thickening agents and enzymes into bread doughs is known in the art. It would be obvious to include these baking aids into the flavor enhancing composition.

20. Methods of making baker's dough and the dough are all known in the art. Adding sodium chloride to the dough, as presently claimed, is also known in the art.

Preparation of frozen doughs and marketing such items are known in the art.

21. Therefore, it would have been obvious to one ordinary skill in the art, at the time the invention was make, to follow the teachings of R1 and modify the ingredients to those ingredients as presently claimed. The combination of lactic acid containing sour dough and sulfur-compound containing yeast extract would initiate the production of flavoring compounds in the presence of baker's yeast in normal fermentation of dough.

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Absent any evidence to contrary and based on the teachings of the cited reference, there would be a reasonable expectation of success in generating enhanced baked flavors.

22. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mohlenkamp, Jr. et al. (US 4,243,691; hereinafter R2).

23. R2 discloses a sodium free salt substitute containing 5'-nucleotides such as 5'-inosinic acid or its nonsodium salts, and 5'-guanosinic acid or its nonsodium salts. The salt substitute has an enhanced salty flavor. (Title, Abstract).

24. R2 discloses that the 5'-nucleotide component comprises 2%-6% by weight of the salt substitutes.

25. Given that the 5'-nucleotides as disclosed by R2 will enhance the salty flavor, and noting that yeast extract is a good source of such 5'-nucleotides, it would be obvious to use the composition containing yeast extract in yeast-leavened bread doughs, or various other food products, in order to reduce or omit the salt component of the bread. Such low sodium breads will have the regular flavor while providing no sodium or very low sodium for people, for example, having hypertension.

26. Therefore, it would have been obvious to incorporate yeast extract into bread dough to take advantage of salty flavor enhancing effects of 5'-nucleotides contained in the yeast extract. Absent any evidence to contrary and based on the teachings of the cited reference, there would be a reasonable expectation of success in taking advantage of yeast extract in bread doughs.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAMID R. BADR whose telephone number is (571)270-3455. The examiner can normally be reached on M-F, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hamid R Badr
Examiner
Art Unit 1794

/KEITH D. HENDRICKS/

Supervisory Patent Examiner, Art Unit 1794